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(54) Title: MODIFIED POLYPEPTIDES FOR TARGETING CELL-ENTRY OF THE ADENOVIRUSES OF SUBTYPE B

(57) Abstract: This invention relates to modified polypeptides comprising two functional components: first, a polypeptide derived from the extracellular region of CD46 as a specific binding site for adenoviruses of the subgroup B, and second, a component capable of binding to a cell surface molecule. Such modified polypeptides are able to direct adenovirusinfection specifically to cells having said cell surface molecule on their surface. The invention relates to nucleic acid sequences encoding fusion proteins comprising a) a polypeptide derived from the extracellular domain of CD46 and b) a heterologous polypeptide, methods for the production of the modified polypeptides and suitable recombinant expression vectors and host cells. Pharmaceutical compositions comprising the modified polypeptide of the invention are useful together with recombinant, genetically engineered adenovirus of subtype B for the treatment and prophylaxis of disorders and diseases, like cancer.

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